

## **REMARKS**

Claims 2, 4-5, 13-14, 40-41, 49-50 and 75-82 are currently pending in the Application. Claims 2, 4-5, 13-14, 40-41 and 49-50 are currently amended. All other pending claims remain in their original or previously amended form. Reconsideration of the Application is respectfully requested.

### **I. Rejections Under 35 U.S.C. § 103(a)**

#### **A. Claims 2 and 79**

Claims 2 and 79 stand rejected as allegedly being unpatentable over the eWatch website service, as archived on May 22, 1998, in view of CyberSleuth and further in view of U.S. Patent 6,519,631 to Rosenschein et al.

#### **1. Current Amendment to Claim 2 Overcomes the Current Rejection**

Claim 2 has been amended and is, accordingly, in condition for allowance. Independent claim 2, as currently amended, is directed to a method for collecting and analyzing electronic discussion messages; wherein the method comprises the computer-implemented steps of (a) collecting a plurality of message information from a plurality of pre-determined electronic discussion forums; (b) storing the plurality of message information in a central data store; (c) categorizing the message information, *with respect to at least one topic*, according to a plurality of pre-determined rules; (d) assigning an opinion rating to the plurality of message information based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules, *the opinion rating indicating at least one of a positive, negative and neutral opinion associated with the at least one topic*; (e) collecting a plurality of objective data from a plurality of objective data sources; (f) analyzing the message information, *opinion rating* and the objective data to identify trends in the pattern of behavior in pre-determined markets and the roles of individual participants in electronic discussion forums *over time*; and (g) generating reports for end-users based on the results of the analyses performed by the present invention.

Specifically, claim 2 has been amended to add that message information is categorized *with respect to at least one topic*. A further amendment adds that the opinion rating indicates at least one of a *positive, negative, and neutral opinion associated with the at least one topic*.

These specific features of this aspect of the present invention are absent from the cited references.

Furthermore, claim 2 has been amended to provide expressly that this aspect of the present invention analyzes the message information, *opinion rating*, and the objective data to identify trends in the pattern of behavior in pre-determined markets and the roles of individual participants in electronic discussion forums *over time*. This feature of analyzing the message information and the objective data to identify trends in the pattern of behavior in pre-determined markets and the roles of individual participants in electronic discussion forums *over time* is absent from the cited eWatch and CyberSleuth references.

For the foregoing reasons, claim 2 is in condition for allowance, and Applicant respectfully requests that the rejection be withdrawn.

**2. eWatch does not enable a person skilled in the art to practice the claimed invention.**

The eWatch reference cited by the Office action does not enable a person skilled in the art to practice the claimed invention. Because of this failure to enable, the eWatch reference is legally insufficient as a prior art reference. The Office action correctly notes that specific source code need not be disclosed to enable a software invention, but the specific functionalities or steps performed by the software must be disclosed.

The Federal Circuit cases cited in the Office action do not support such a loosened standard of enablement for software-related inventions. As previously stated, *Fonar Corp. v. General Electric Co.*, 107 F.3d 1543, 41 U.S.P.Q.2d 1801 (Fed. Cir. 1997), does not even address the enablement requirement at all. The *Fonar* case was decided on the best mode requirement of 35 U.S.C. § 112, and the court explained that “where software constitutes a part of a best mode of carrying out an invention, description of such a best mode is satisfied by a disclosure of the functions of the software.” *Id.* at 1549 (emphasis added). Thus, while “flow charts or source code listings are not a requirement,” the “functions of the software” must be adequately disclosed. *Id.* In the case of *In re Hayes*, 982 F.2d 1527, 25 U.S.P.Q.2d 1241 (Fed. Cir. 1992), the court addressed the written description requirement of 35 U.S.C. § 112 as applied to an invention embodied in a microprocessor. The court observed that specific programming code need not be disclosed because “[o]ne skilled in the art would know how to program a

microprocessor to perform the necessary steps described in the specification.” Id. at 1534. Central to this holding is the underlying requirement that the specific functions to be performed must be disclosed, because a person skilled in the art would need to know what functions are to be performed in order to write code to perform those functions. As explained by the court, this requires disclosure of “a microprocessor having certain capabilities and the desired functions it was to perform.” Id.

The eWatch references cited in the Office action fail this requirement because they do not recite specific functions to be performed. The news articles about eWatch discuss the business goals of the eWatch service, one of which is to identify messages that contain words expressing positive or negative opinions about a particular company. These news articles, however, do not explain how eWatch purportedly does this; they only contain general statements that this is a business goal of eWatch, such as:

- “These days, eWatch’s proprietary software does the first round of filtering, churning out reports based on keywords – perhaps a client’s name, combined with ‘boycott,’ ‘angry,’ or even cruder denigrating terms.” (eWatch news articles, p.23)

Similar to *Fonar*, to validly cite eWatch as a reference, flow charts or source code are not required, but the “functions of the software” must be adequately disclosed by eWatch. By merely stating in a newspaper interview that the eWatch software filters online material, surely the required adequate disclosure is not satisfied. By explaining the goals of their software, eWatch (in this article) does not permit one skilled in the art to know how to program software to perform the necessary steps of filtering said online material. Therefore, the required disclosure under *Fonar* is not met and eWatch is legally insufficient as a prior art reference. Furthermore, because the specific functions underlying the desired goals are missing from the eWatch news articles, these reference materials are legally insufficient as a prior art reference.

Claim 79 depends from claim 2 and is therefore allowable for at least the same reasons stated above.

For the above reasons, claims 2 and 79 are in condition for allowance, and Applicant respectfully requests that the rejection be withdrawn.

**B. Claim 82**

Claim 82 stands rejected as allegedly being unpatentable over the eWatch website service, as archived on May 22, 1998, in view of CyberSleuth, further in view of U.S. Patent 6,519,631 to Rosenschein et al., and even further in view of Trigaux (“Cyberwar Erupts Over Free Speech Across Florida, Nation”).

Claim 82 depends from claim 2 and is therefore allowable for at least the same reasons stated above.

Therefore, it is respectfully submitted that claim 82 is in condition for allowance and Applicant respectfully requests that the rejection be withdrawn.

**C. Claims 4, 40, 80, and 81**

Claims 4 and 40 stand rejected as allegedly being unpatentable over the eWatch website service, as archived on May 22, 1998, in view of CyberSleuth, and further in view of Trigaux (“Cyberwar Erupts Over Free Speech Across Florida, Nation”). Claims 4 and 40 have been amended.

Independent claim 4, as amended, is directed to a system for processing message traffic in a plurality of electronic discussion forums, comprising a computer-implemented message collector for collecting messages from the plurality of electronic discussion forums, a computer-implemented message categorizer for processing the messages based on a series of topics, a computer-implemented data analyzer for tracking message content posted by a plurality of pseudonyms and the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages, a storage device containing a database storing configuration information for the plurality of electronic discussion forums, and a *computer-implemented report generator for generating a report based upon the analysis of the data analyzer*; wherein the *computer-implemented* message collector communicates with the database, thereby enabling the *computer-implemented* message collector to collect messages corresponding to a plurality of message formats or communications protocols.

Examiner correctly cites on page 21 of the Office Action that Trigaux “discloses how user postings are tracked over time.” The Trigaux article discloses the tracking of user postings

by means of human viewing of said user postings. Furthermore, the user postings discussed in Trigaux may be posted by a plurality of pseudonyms.

However, Trigaux fails to disclose a *computer-implemented data analyzer* for tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages. The act of humans viewing (at more than one distinct time) user postings does not teach or even suggest a computer-implemented data analyzer which tracks posted content over time. Alternatively, the act of humans viewing multiple messages created with distinct timestamps does not teach or even suggest a computer-implemented data analyzer which tracks posted content over time.

Similarly, Trigaux fails to disclose a *computer-implemented report generator* for generating a report based upon the analysis of the data analyzer. Trigaux only discloses the act of humans viewing user postings and filing lawsuits against users with online monikers. This act of human viewing in no way teaches or suggests a “report generator” for generating a report based on an analysis. Further, this article fails to suggest that a report is generated by means of a computer-implemented process.

Claim 40 has also been amended to include assigning opinion ratings in the message content posted by a plurality of pseudonyms and generating a market report from, at least in part, the message content and the opinion ratings.

Independent claim 40, as amended, is directed to a method for processing message traffic in a plurality of electronic discussion forums, comprising the steps of: collecting messages from the plurality of electronic discussion forums, processing the messages based on a series of topics, tracking message content posted by a plurality of pseudonyms and the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages, storing configuration information for the plurality of electronic discussion forums in a database, and wherein the step of collecting messages comprises collecting messages corresponding to a plurality of message formats or communications protocols, *assigning opinion ratings* in the message content posted by the plurality of pseudonyms, and *generating a market report from, at least in part, the message content and the opinion ratings*.

Similar to claim 13 above, Trigaux fails to disclose these additional aspects of the present invention. Trigaux only discloses the act of humans viewing user postings and filing lawsuits

against users with online monikers. This act of human viewing in no way teaches or suggests generating a market report based on message content or opinion ratings.

For the foregoing reasons, claims 4 and 40 are in condition for allowance, and Applicant respectfully requests that the rejections be withdrawn.

Claims 80 and 81 depend from claim 4 and 40, respectively, and are therefore allowable for at least the same reasons stated above.

Therefore, it is respectfully submitted that claims 4, 40, 80, and 81 are in condition for allowance and Applicant respectfully requests that the rejection be withdrawn.

**D. Claims 13, 14, 49, and 50**

Claims 13 and 49 stand rejected as allegedly being unpatentable over the eWatch website service, as archived on May 22, 1998, in view of CyberSleuth, further in view of U.S. Patent 6,519,631 to Rosenschein et al., and even further in view of Trigaux (“Cyberwar Erupts Over Free Speech Across Florida, Nation”).

**1. Current Amendments to Claims 13 and 49 Overcome the Current Rejection**

Claim 13, as currently amended, is directed to a system for processing message traffic in a plurality of electronic discussion forums, comprising a computer-implemented message collector for collecting messages from the plurality of electronic discussion forums, a computer-implemented message processor for processing the messages according to a series of topics, wherein the message processor processes a message to compute a *numerical relevance score* of the message to at least one topic from the series of topics *on a numerical scale*, a computer-implemented data analyzer for tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages, a storage device for storing the messages, and a *computer-implemented report generator for generating a market report on the at least one topic based upon the analysis of the data analyzer*; wherein the message processor processes the messages to compute an *opinion rating associated with the at least one topic* for the message based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules; *wherein the computed opinion rating indicates at least one of a positive, negative and neutral opinion*

*associated with the at least one topic; whereby the numerical relevance score and opinion rating are reflected, at least in part, in the market report on the at least one topic.*

Claim 13 has also been amended to teach that an opinion *rating associated with the at least one topic* is computed. Furthermore, claim 13 has been amended to teach that the *computed opinion rating indicates a positive or negative opinion associated with the at least one topic, whereby the numerical relevance and opinion rating can be accessed to perform market analysis on the at least one topic*. Support for these amendments pertaining to relevance rating may be found on page 14, lines 11-23 and page 15, lines 1-13 of the application. Support for these amendments pertaining to opinion rating may be found on page 9, lines 7-9, page 15, lines 14-19 and page 16, lines 1-6 of the application. For this reason, claims 13 and 49 are in condition for allowance.

The above italicized amendments of claim 13, in addition to the amendment of a *computer-implemented report generator for generating a market report on the at least one topic based upon the analysis of the data analyzer*, place this claim in condition for allowance by overcoming the current rejection.

Claim 49 has been similarly amended to include these aspects. Claim 49, as currently amended, is directed to a method for processing message traffic in a plurality of electronic discussion forums, comprising the computer-implemented steps of collecting messages from the plurality of electronic discussion forums, processing the messages according to a series of topics and computing a *numerical relevance score* of the messages to at least one topic from the series of topics *on a numerical scale*, and tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages; wherein the processing step further comprises the computer-implemented step of computing an opinion *rating* for the message based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules according to the at least one topic; *wherein the computed opinion rating indicates at least one of a positive, negative and neutral opinion associated with the at least one topic; the method further comprising the step of generating a market report on the at least one topic from, at least in part, the numerical relevance score and opinion rating from the processing step.*

Dependant claim 14 has also been amended to be consistent with the current amendment to claim 13, the claim from which it depends. For this reason, claim 14 is also in condition for allowance.

Dependant claim 50 has also been amended to be consistent with the current amendment to claim 49, the claim from which it depends. For this reason, claim 50 is also in condition for allowance.

Therefore, it is respectfully submitted that claims 13, 14, 49, and 50 are in condition for allowance and Applicant respectfully requests that the rejection be withdrawn.

3. **eWatch does not enable a person skilled in the art to practice the claimed invention.**

The eWatch reference cited by the Office action does not enable a person skilled in the art to practice the claimed invention. Because of this failure to enable, the eWatch reference is legally insufficient as a prior art reference. The Office action correctly notes that specific source code need not be disclosed to enable a software invention, but the specific functionalities or steps performed by the software must be disclosed.

Using the same analysis as discussed in claims 2 and 79 above, claims 13 and 49 are in condition for allowance, and Applicant respectfully requests that the rejection be withdrawn.

Claims 14 and 50 depend from claims 13 and 49, respectively, and are therefore allowable for the same reasons stated above.

3. **Trigaux fails to teach a *computer-implemented data analyzer* for tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages.**

Independent claim 13, as currently amended, is directed to a system for processing message traffic in a plurality of electronic discussion forums, comprising: a computer-implemented message collector for collecting messages from the plurality of electronic discussion forums; a computer-implemented message processor for processing the messages according to a series of topics, wherein the message processor processes a message to compute a *numerical* relevance of the message to at least one topic from the series of topics *on a numerical*

*scale; and a computer-implemented data analyzer for tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages; wherein the message processor processes the messages to compute an opinion rating associated with the at least one topic for the message based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules according to the at least one topic; wherein the computed opinion rating indicates a positive or negative opinion associated with the at least one topic, whereby the numerical relevance and opinion rating can be accessed to perform market analysis on the at least one topic.*

Independent claim 49, as currently amended, is directed to a method for processing message traffic in a plurality of electronic discussion forums, comprising the *computer-implemented* steps of: collecting messages from the plurality of electronic discussion forums; processing the messages according to a series of topics and computing a *numerical* relevance of the messages to at least one topic from the series of topics *on a numerical scale*; and tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages; wherein the processing step further comprises the step of computing an opinion for the message based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules according to the at least one topic.

Examiner correctly cites on page 21 of the Office Action that Trigaux “discloses how user postings are tracked over time.” The Trigaux article discloses the tracking of user postings by means of human viewing of said user postings. Furthermore, the user postings discussed in Trigaux may be posted by a plurality of pseudonyms.

However, Trigaux fails to disclose a *computer-implemented data analyzer* for tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages. The act of humans viewing (at more than one distinct time) user postings does not teach or even suggest a computer-implemented data analyzer which tracks posted content over time. Alternatively, the act of humans viewing multiple messages created with distinct timestamps does not teach or even suggest a computer-implemented data analyzer which tracks posted content over time.

For the foregoing reasons, claims 13 and 49 are in condition for allowance, and Applicant respectfully requests that the rejection be withdrawn.

Claims 14 and 50 depend from claims 13 and 49, respectively, and are therefore allowable for at least the same reasons stated above.

Therefore, it is respectfully submitted that claims 13, 14, 49, and 50 are in condition for allowance and Applicant respectfully requests that the rejection be withdrawn.

**E. Claims 5, 41, 75, and 77**

Claims 5, 41, 75, and 77 stand rejected as allegedly being unpatentable over the eWatch website service, as archived on May 22, 1998, in view of CyberSleuth, further in view of Trigaux (“Cyberwar Erupts Over Free Speech Across Florida, Nation”), and even further in view of U.S. Patent 6,067,539 to Cohen.

Claims 5 and 75 depend from claim 4, and are therefore allowable for at least the same reasons stated above. Furthermore, claim 5 has been amended. Claim 5, as currently amended, teaches that a relevance score is a *numerical value on a numerical scale*, is computed by the *computer-implemented* message categorizer in claim 4, and the computer-implemented data analyzer utilizes the relevance score in tracking message content. For this additional reason, claim 5 is now in condition for allowance.

Claims 41 and 77 depend from claim 40, and are therefore allowable for at least the same reasons stated above. Furthermore, claim 41 has been amended. Claim 41, as currently amended, teaches that *generating the market report uses a relevance score*, in addition to the message content and opinion rating disclosed in claim 40.

Therefore, it is respectfully submitted that claims 5, 41, 75, and 77 are in condition for allowance and Applicant respectfully requests that the rejection be withdrawn.

**F. Claims 76 and 78**

Claims 76 and 78 stand rejected as allegedly being unpatentable over the eWatch website service, as archived on May 22, 1998, in view of CyberSleuth, further in view of Trigaux (“Cyberwar Erupts Over Free Speech Across Florida, Nation”), further in view of U.S. Patent 6,619,631 to Rosenschein et al. and even further in view of U.S. Patent 6,067,539 to Cohen.

Claims 76 and 78 depend from claims 13 and 49, respectively, and are therefore allowable for at least the same reasons stated above.

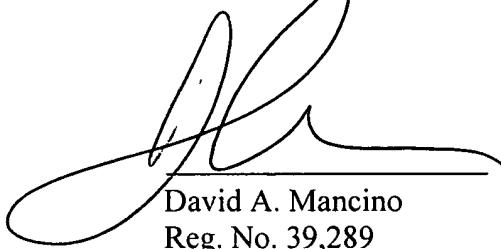
Therefore, it is respectfully submitted that claims 76 and 78 are in condition for allowance and Applicant respectfully requests that the rejection be withdrawn.

**IV. Conclusion**

In light of the foregoing, it is respectfully submitted that claims 2, 4, 5, 13, 14, 40, 41, 49, 50, and 75-82, now pending, are distinguishable from the references cited, and in condition for allowance. Reconsideration and withdrawal of the rejections of record is respectfully requested.

If the Examiner wishes to discuss any aspect of this response, please contact the undersigned at the telephone number provided below.

Respectfully submitted,



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